



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/780,854

02/19/2004

Toshihiko Matsunaga

31759-201213

2462

26694 7590 08/19/2008
VENABLE LLP
P.O. BOX 34385
WASHINGTON, DC 20043-9998

EXAMINER

SIEDLER, DOROTHY S

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

08/19/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/780,854	Applicant(s) MATSUNAGA ET AL.	
	Examiner Dorothy Sarah Siedler	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2-19-04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the amendment filed May 6, 2008. Claims 1-15 are pending, all of which have been amended.

Response to Amendment

Applicant has amended claim 5 to overcome the 35 U.S.C. §112 2nd rejection; therefore the rejection is withdrawn.

Applicant has amended claim 15 to overcome the 35 U.S.C. §101 rejection; therefore the rejection is withdrawn.

Response to Arguments

Applicant's arguments filed May 6, 2008 have been fully considered but they are not persuasive.

Applicant argues that, “Ito does not parse **a logical hierarchical structure** of the old original document or the new original document to a **plurality of sentences blocks**. Instead, Ito teaches traversing the old original document to find a sentence that is similar to an i-th sentence in the new original document. Thus, there is no teaching or suggestion in Ito of parsing ‘a logical hierarchical structure of a plurality of sentence blocks, including at least one sentence respectively’ as recited in the amended claim 1” (Remarks page 12); however the examiner respectfully disagrees. ***Ito*** compares input data D2 to stored data D1 and determines a similarity, the comparison performed on every sentence in the D2 and D1 data. (column 4 lines 40-65). The comparison can be performed using main verbs of the sentence, therefore parsing must be

Art Unit: 2626

performed. Applicant additionally states that the hierarchical structure recited in claim 1, "may refer to a natural-linguistic and logical hierarchical structure of a writing, which indicates a structure related to positions and inclusive relations of chapters, clauses, paragraphs, sentences, etc." (Remarks page 10); since *Ito* compares sentences of a human language or languages it is inherent that these have a natural linguistic and logical hierarchical structure of propositions and including clauses and sentences. Therefore *Ito* discloses, "a logical hierarchical structure parsing section which parses a logical hierarchical structure of a plurality of sentence blocks, including at least one sentence respectively, in the constituent elements of the first document and which parses a logical hierarchical structure of a plurality of sentence blocks, including at least one sentence respectively, in the constituent elements of the second document" as recited in claim 1.

Applicant also argues that, "Ito fails to teach or suggest, 'a relationship section which detects the relationship between the sentence blocks of the first document and the sentence blocks of the second document on the basis of a parsing result from the logical structure parsing section", adding that, "in Ito a relationship (e.g. similarity) is determined between sentences based on the words within the sentence. In the present claim, on the other hand, the relation is detected between sentence blocks on the basis of the parsing result. Thus, the teachings of Ito are not applicable to, and thus do not anticipate, claim 1" (Remarks page 12); however the examiner respectfully disagrees. As discussed above, *Ito* compares sentences in data D1 to data D2 based on words, such as a main verb, or groups of words within the sentence. Thus, a parsing result must be determined. *Ito* also discloses that multiple sentences, i.e. sentence blocks, are evaluated (column 4 lines 49-62 and Figures 5 and 8). Therefore *Ito* discloses, "a relationship detection section which detects the relationship between the sentence blocks of the first document and the

sentence blocks of the second document on the basis of a parsing result from the logical hierarchical structure parsing section”, as recited in claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by ***Ito*** (5,140,522).

As per claims 1 and 8, ***Ito*** discloses a document relationship inspection apparatus and method which inspects a relationship between constituent elements of a first document and constituent elements of a second document, comprising:

a logical hierarchical structure parsing section which parses a logical hierarchical structure of a plurality of sentence blocks, including at least one sentence respectively, in the constituent elements of the first document and which parses a logical hierarchical structure of a plurality of sentence blocks, including at least one sentence respectively, in the constituent elements of the second document (column 4 lines 40-65 and column 5 lines 44-60, *words and sentences are used to measure the similarity between a first*

language input data (second document) and a first language storage data (first document), therefore it is inherent that each type of data was parsed); and

a relationship detection section which detects the relationship between the sentence blocks of the first document and the sentence blocks of the second document on the basis of a parsing result from the logical hierarchical structure parsing section (column 4 lines 40-65 and column 5 lines 44-60, *sentences and/or words from input data D1 (second document) are compared to sentences and/or words from the storage unit data D2 (first document) to determine a similarity*).

As per claims 2 and 9, **Ito** discloses a document relationship inspection apparatus according to claim 1, wherein the relationship detection section detects the relationship related to a sentence block at an upper hierarchy and then detects the relationship of a sentence block at a lower hierarchy (column 4 lines 40-45, *every sentence from the input data D1 is compared to determine a similarity with the sentences in storage data D2*).

As per claims 3 and 10, **Ito** discloses a document relationship inspection apparatus according to claim 1, wherein the relationship detection section comprises a first degree-of-similarity calculation section which calculates a predetermined degree of similarity between a sentence block related to the first document and a sentence block related to the second document (column 4 lines 40-65, *every sentence from the input*

*data D1(second document) is compared to determine a similarity with the storage data D2 (first document)), wherein a relationship of a sentence block having a higher degree of similarity to sentence blocks at the same hierarchy is preferentially detected, and the first degree-of-similarity detection section is controlled to increase the degree of similarity of a sentence block which is near the sentence block the relationship of which is detected in the document (column 6 lines 47-54, *the similar sentences are obtained and displayed, and the user can then choose the correct sentence, or input the correct sentence and its translation*).*

As per claims 4 and 11, ***Ito*** discloses a translation process apparatus which uses a parallel-translation dictionary in which a parallel translation between original sentences in an original related to a first document and translated sentences in the first document is registered to perform a translation process of an original related to a second document serving as a revised-edition document obtained by changing at least a part of the first document, comprising:

a document relationship inspection apparatus according to claim 1 (column 4 lines 40-65 and column 5 lines 44-60); and

a block translation process section which executes a translation process using the parallel-translation dictionary to at least a sentence block the relationship of which is detected by the document relationship inspection apparatus in sentence blocks included in the original related to the second document (column 4 lines 14-20, *translation*

candidates for the input data D1 are determined, using the translation sentences corresponding to the similar D2 data).

As per claims 5 and 12, **Ito** discloses a translation process apparatus according to claim 4, comprising a first difference information display section which, when a translation result of the sentence block the relationship of which is detected by the document relationship inspection apparatus, displays first difference information representing a difference between the originals related to the first document and the second document (Figure 5B and 5C, *the input data D1 (second document) is displayed with similar sentences and their translations, detected from the corresponding storage data (first document)*)).

As per claims 6 and 13, **Ito** discloses a translation process apparatus according to claim 4, comprising a second difference information display section which, displays second difference information representing a difference between a sentence block of an upper hierarchy to which the sentence block the relationship of which is detected by the document relationship inspection apparatus belongs and the original of the first document (column 4 lines 40-65, *every sentence from the input data D1(second document) is compared to determine a similarity with the storage data D2 (first document)*) and Figure 5B and 5C, *the input data D1 (second document) is displayed*

with similar sentences and their translations, detected from the corresponding storage data (first document)).

As per claims 7 and 14, **Ito** discloses a translation process apparatus according to claim 4, comprising:

a second degree-of-similarity calculation section which calculates a predetermined degree of similarity between the sentence block of the original related to the first document and the sentence block of the original related to the second document (column 4 lines 40-65, *every sentence from the input data D1 (second document) is compared to determine a similarity with the storage data D2 (first document))*); and

a corresponding candidate process section which stores, as corresponding candidate blocks, sentence blocks having degrees of similarity of which are detected by the second degree-of-similarity calculation section and which are not less than a predetermined threshold value, and displays the sentence blocks depending on dialogue with a user (column 5 lines 55-64, *a similarity measurement is determined based on matching 80% of the words in each sentence, its use dependent upon a command from the*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over ***Ito***.

As per claim 15, ***Ito*** discloses an apparatus including a central processing unit to execute a document relationship inspection program which inspects the relationship between constituent elements of a first document and constituent elements of a second document, causing the central processing unit to realize:

A logical hierarchical structure parsing function which parses a logical hierarchical structure of a plurality of sentence blocks, including at least one sentence respectively, in the constituent elements of the first document and which parses a logical hierarchical structure of a plurality of sentence blocks, including at least one sentence respectively, in the constituent elements of the second document (column 4 lines 40-65 and column 5 lines 44-60, *words and sentences are used to measure the similarity between a first language input data (second document) and a first language storage data (first document), therefore it is inherent that each type of data was parsed*); and

a relationship detection function which detects the relationship between the sentence block of the first document and the sentence block of the second document on the basis of a parsing result from the logical structure parsing section (column 4 lines 40-65 and column 5 lines 44-60).

Ito does not disclose a program which performs the functions recited above. However, *Ito* does disclose the use of a keyboard as input and a CRT screen for display (column 3 lines 55-60), which suggests that the apparatus is a computer.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to perform the method of *Ito* on a program, since a computer can perform the required computations at speeds far greater and more accurately than a human, thus reducing processing time and producing much more reliable results.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see the PTO-892 form.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 2626

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dorothy Sarah Siedler whose telephone number is 571-270-1067. The examiner can normally be reached on Mon-Thur 9:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DSS

/Michael N. Opsasnick/

Primary Examiner, Art Unit 2626

Application/Control Number: 10/780,854
Art Unit: 2626

Page 12